#### STEERING COMMITTEE

A steering committee was formed to assist with completion of the project. The primary purpose of the steering committee was to provide input on how to develop the CIR imagery, map wetland and riparian features, construct the GIS database, and compile the historical information. This committee met four times between December 2001 and April 2003. A group email list was created to contact steering committee members and others interested in the project. The following individuals served on the steering committee:

Table 3
Project Steering Committee Members

Name	Affiliation
Katie Alvin	Gallatin Conservation District
Allen Armstrong	Gallatin County GIS Department
Alan English	Gallatin Local Water Quality District
James Goehrung	City of Bozeman and Bozeman Watershed Council
Beth Kaeting	Sacajawea Audubon
Rick Ladzinski	Bozeman Watershed Council
Jim Madden	Gallatin Valley Land Trust
Duncan Patten	MSU Riparian Ecologist
Judy Sandford	City of Bozeman Planning Department
Lanette Windemaker	Gallatin County Planning Department

# **LIMITATIONS**

### **Inventory vs. Delineation**

The land areas identified in this report as **wetlands** do not represent **delineated wetlands** for regulatory purposes. The wetland areas are referred to as **inventoried**, and were located using a combination of color infrared (CIR) aerial imagery, ground-truthing, and existing information. The areas mapped are considered to be ecological wetlands rather than jurisdictional wetlands as defined by the Army Corp of Engineers. Inventoried areas represent land areas where the preponderance of information indicates wetlands are probably present, but these areas have not been delineated to verify the presence of jurisdictional wetlands.

The areas identified as **riparian/wetlands mixed** were primarily inventoried based on visible indications of color and texture on the CIR imagery. The focus was on woody riparian trees and shrubs that were easily identified on the CIR imagery. Wetlands are also present in many areas of visible woody riparian vegetation. Since these wetlands could not be viewed through the riparian canopy, but were known to be present, the inventoried areas are referred to as **riparian/wetland mixed**. The minimum mapping unit size for both types of inventoried areas is approximately ½ acre.

A conservative approach was used to inventory the wetland areas, meaning some areas inventoried as wetlands may not be actual wetlands. Due to the limitations of the imagery and the methods used, there is also the possibility that wetland areas were missed.

The intent of this project was to provide a reasonable spatial representation of the locations of wetland and riparian areas to help guide the need for more detailed site investigations.

## **CIR Imagery and GIS Database**

The color infrared (CIR) imagery used as the primary reference for this project was developed from aerial photographs taken on September 9, 2001. The photos were processed into digital orthophoto quadrangle (DOQ) maps. These maps were used as an image layer to create a Geographic Information System (GIS) database. While project work was conducted between 2001 and 2004, the inventory of wetlands and riparian areas is considered current as of the aerial photography date in 2001. The GIS database developed for the project is primarily a spatial database focused on the geographic location of the inventoried wetland and riparian areas. Detailed inspections of all of the inventoried areas (approximately 900) were not completed. However, over 240 sites were field checked to help assure the accuracy of the computer mapping. The attributes associated with the inventoried areas in the GIS database are limited, but do include other useful information. The structure of the GIS database allows for adding more fields and information in the future if needed.

# **Historical Mapping**

The historical extent of wetlands and riparian areas was determined using a combination of historical aerial photographs, historical research, and existing spatial databases with attributes associated with wetlands and riparian areas. Due to the limitations of these resources the historical extent of wetlands and riparian areas could not be determined separately. The areas mapped represent the "maximum potential historical extent of aquatic resources." This layer includes potential historical wetlands and riparian areas, and surface water features.